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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,549	04/12/2004	Frank A. Howell	6964CIP	1813

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EXAMINER

RODRIGUEZ, RUTH C

ART UNIT	PAPER NUMBER
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3677

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/822,549	Applicant(s) HOWELL, FRANK A.	
	Examiner Ruth C. Rodriguez	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the amendment filed on 11 April 2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



Judy Swann

Claim Objections

2. Claim 12 is objected to because of the following informalities: Claim 12 that depends on claims 1 or 9 recites "said jamming surfaces" in the first line. There is insufficient antecedent basis for this limitation in the claim when taken in consideration with dependent claim 1 that does not contain this limitation.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 9 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dillin (US 541,729) in view of Mullikin (US 521,806).

Dillin discloses a buckle (A) is used with a flexible strap (E) having a substantially uniform width and thickness and end tab of increased thickness (Figs. 1 and 3). The buckle captures and releasably retains the end tab (Figs. 1 and 3). The buckle comprises a base (lower surface as seen in Fig. 4), parallel side walls (side surface as seen in Fig. 4), first slots (B,D) and flanges (upper surface as seen in Fig. 4). The side walls extend upwardly to cooperate therewith in defining an open-ended receiving

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channel having an entry end (right end of H) and an exit end (left end of H). The first slots extend transversely across the base (Figs. 1-4). The buckle is attached to the strap by weaving the strap into and out of the channel through the first slots (Figs. 1 and 3). The flanges are spaced vertically from the base and extend inwardly in cantilever fashion from the side walls to define an open-ended slot communicating with and extending along the length of the receiving channel (Figs. 1-4). The slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel and the flanges have undersides receiving the end tab in the receiving channel via the strap entry end and to releasably wedge the end tab in and prevent withdrawal of the end tab from the receiving channel via the exit end (Figs. 1, 2 and 9). Dillin fails to disclose that the flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel. However, Mullikin discloses a buckle (B) is used with a flexible strap (C) having a substantially uniform width and thickness and end tab (knot) of increased thickness (Figs. 1 and 2). The buckle captures and releasably retains the end tab (Figs. 1 and 2). The buckle comprises a base (A'), parallel side walls (A2) and flanges (A3). The side walls extend upwardly to cooperate therewith in defining an open-ended receiving channel having an entry end (lower end of the buckle as shown in Figs. 1-3) and an exit end (upper end of the buckle as shown in Figs. 1-3). The flanges are spaced vertically from the base and extend inwardly in cantilever fashion from the side walls to define an open-ended slot communicating with and extending along the length of the receiving channel (Figs. 1-4). The flanges have

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converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel (Figs. 1-3). The converging sections of the flanges allow easier insertion of the end tab into the buckle (Page 1, lines 60-91). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flanges with converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel as taught by Mullikin in the buckle disclosed by Dillin. Doing so, allows easier insertion of the end tab into the buckle.

Dillin discloses a buckle (A) is used with a flexible strap (E) having a substantially uniform width and thickness and end tab of increased thickness (Figs. 1 and 3). The buckle captures and releasably retains the end tab (Figs. 1 and 3). The buckle comprises a base (lower surface as seen in Fig. 4), parallel side walls (upper surface as seen in Fig. 4) and flanges (upper surface as seen in Fig. 4). The side walls extend upwardly from the base to cooperate therewith in defining an open-ended receiving channel (Figs. 1-4). The flanges are spaced vertically from the base and extend inwardly from the side walls to define an open-ended slot communicating with the receiving channel (Figs. 1-4). The flanges have converging sections leading from one end of the slot to an intermediate location along the length thereof (Figs. 1-4). The slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel (Figs. 1-4). The flanges have undersides with downwardly sloping jamming surfaces configured to frictionally retain the end tab in the receiving channel (Figs. 1-4). Dillin

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fails to disclose that the flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel. However, Mullikin discloses a buckle (B) is used with a flexible strap (C) having a substantially uniform width and thickness and end tab (knot) of increased thickness (Figs. 1 and 2). The buckle captures and releasably retains the end tab (Figs. 1 and 2). The buckle comprises a base (A'), parallel side walls (A2) and flanges (A3). The side walls extend upwardly to cooperate therewith in defining an open-ended receiving channel having an entry end (lower end of the buckle as shown in Figs. 1-3) and an exit end (upper end of the buckle as shown in Figs. 1-3). The flanges are spaced vertically from the base and extend inwardly in cantilever fashion from the side walls to define an open-ended slot communicating with and extending along the length of the receiving channel (Figs. 1-4). The flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel (Figs. 1-3). The converging sections of the flanges allow easier insertion of the end tab into the buckle (Page 1, lines 60-91). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flanges with converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel as taught by Mullikin in the buckle disclosed by Dillin. Doing so, allows easier insertion of the end tab into the buckle.

Dillin fails to disclose that:

- The end tab defines a shoulder extending transversely across the width of the strap and the undersides of the flanges define stop surfaces engageable with the shoulder (Figs. 1 and 3).
- The jamming surfaces slope downwardly towards the stop surfaces (Figs. 1-4).
- The base is secured to a section of the strap (Figs. 1 and 3).
- The base is formed as an integral part of a carrier structure (L after it is fastened).
- The buckle further comprises attachment slots extending transversely across the base (Figs. 1-4). The buckle is attached to the strap by weaving the strap into and out of the channel through the attachment slots (Figs. 1-4).

Response to Arguments

5. Applicant's arguments with respect to claims 1, 9 and 11-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dillon (US 541,729), Watson (US 1,466,495), Campbell et al. (US 4,991,265), Pritchard et al. (US 5,007,138), McIntire (US 5,383,259), Elseheimer et al. (US 5,542,462), Scholey (US 5,970,585) and Munsell, Jr. (US 6,192,559 B1) are cited to show state of the art with respect to buckles that have some of the features claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

rcr
May 22, 2007


JJ Swann
Supervisory Patent Examiner
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